



Design Thinking Tips

Preparing Students

- Group dynamics is crucial to success: create group names, do team-building exercises, teaching Socratic seminar for discussion, strategic/heterogeneous groupings by the teacher)
- In lower elementary, independent receptive (listening and reading) and productive (speaking and writing) skills can be a barrier – Children must be competent in using tech and other supports.
- Do a short trial run through the process ahead of time to feel out the dynamic between the kids, you, and the process. This will provide information for planning (e.g. priming, modifications, scheduling).

Planning

- Framing the question: consider relevance to children, importance in the real world, and appropriate level of challenge.
- Mapping out: Map out sessions in large chunks to keep momentum and allow ample time, but give breaks to maintain stamina.
- Don't prep too much: You will need to revise things along the way. Don't plan with too much detail. This is student-centered. As such, you will need to create formats, organizers, etc. as you go to meet the needs of the students and the projects! Do this in-class with the students as much as possible to involve them, appropriately address their needs, and increase their understanding of the expectations and goals. (It also saves you time!)
- Presentation of the project to the kids: Have a good pitch (e.g. epic, relevant).
- Get ideas of how you think things will go/how kids will take things (trajectories), and plan accordingly. What would excite, confuse, which direction would it take?

Scaffolding

- Use tech support: text-to-speech, dictation, photo/video recordings, email/Dropbox to share docs.
- Focus on patterns, unanswered questions, big ideas, details, and multiple perspectives. (You can use icons of depth and complexity.)
- Interactive (teacher- and technology-assisted) writing helps lower-elementary students. You can also compile information that children have helped to find/create for their reference.
- Strategic groupings: Peer support through heterogeneous groupings.
- Focus just on helping children to find direction/focus and providing scaffolding and

resources (being unbiased, not planting ideas or being judgmental/biased/opinionated, just giving logical, comprehensive feedback). Increase scaffolding only to what is absolutely necessary to keep students engaged and successful, while staying true to the process.

During the Project: General

- Be super engaging/charismatic “pitch men” the whole time! Hype everything up! Make it special.
- Break the challenge apart to be defined and understood by children.
- Model *everything* in the process as you go; let students flesh it out and extend it.
- When modeling, use examples that student would *not* think of or want to use so that they don't latch on to them.
- Keep momentum, move quickly, and keep enthusiasm!
- Keep importance/relevance/goals at the forefront to guide and motivate.
- Don't continue if they aren't interested. Stop, and rework.
- Let *the students* lead (with ideas/direction) and take ownership.
- Use the “Need > idea > plan > rationale” format when possible. It simplifies.

During the Project: Discovery and Interpretations

- On-location/hands-on research is preferred.
- Interviews work well for pre-writers since it's listening, not reading. Record it for reference.
- A concentration on *needs* is very helpful in getting focus and delving deeper.

During the Project: Ideation

- Create categories by which to group ideas.

During the Project: Prototyping and Final Products/Presentation

- Do as many cycles of prototyping/feedback as you can! The kids are totally into it and get a lot from it!

Additions/Extensions

- Create rubrics and outlines *with* students.
- Provide time for students critiquing each other. It's very productive.
- Have a focus on forming and presenting *arguments* (common core).
- Intentionally work other curriculum/standards/foci into the project (e.g. essential questions, decoding, spelling, writing, list./speaking, math).